

[002] FIELD OF THE INVENTION

[003] The present invention relates to a die-casting brass alloy, which is resistant to dezincification.

[004] BACKGROUND OF THE INVENTION

[015] SUMMARY OF THE INVENTION

[019] BRIEF DESCRIPTION OF THE DRAWINGS

[020] Fig. 1 shows a portion of a phase diagram Cu-Zn;

[021] Fig. 2 describes a problem with brittleness by heat;

[022] Fig. 3 shows a phenomenon with increasing dezincification depths with an increasing copper content;

[023] Fig. 4 shows how the amount of peritectically solidifying materials (solidification primarily in the alpha-phase) quickly is reduced, when the copper content in the alloy is reduced, whereas the increase of the amount in the beta-phase in the final structure increases relatively slowly;

[024] Fig. 5 shows the result from investigations of the dezincification depth according to the international standard ISO 6509 for die-cast work pieces having a 6 mm thickness of material as to alloys having a varying Cu content; and

[025] Fig. 6 shows the result for the corresponding investigation with a material thickness of 16 mm.

[026] DETAILED DESCRIPTION OF THE INVENTION

[027] These conclusions have been confirmed by the results of an extensive development effort during several years, the purpose of which has been to find appropriate alloy combinations.